DOCUMENT RESUME

ED 424 744 FL 025 517

AUTHOR Hyon, Sunny
TITLE Models of Lecture Discourse: Applications for Academic Listening and Future Research Directions. Colloquium on Academic Listening within the EAP Curriculum.
PUB DATE 1997-03-00
NOTE 18p.; Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages (31st, Orlando, FL, March 11-15, 1997).
PUB TYPE Opinion Papers (120) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Discourse Analysis; *English for Academic Purposes; *Language Styles; *Lecture Method; *Listening Comprehension; Second Language Instruction; Second Language Learning

ABSTRACT

The speech introduces a colloquium on the teaching of listening comprehension to students of English for academic purposes (EAP). The colloquium's aim is to address ways that EAP instructors can improve students' lecture listening skills by discussing the types of background discourse knowledge and listening strategies that English-as-a-Second-Language (ESL) students need to effectively comprehend lectures. Ways that ESL instructors can equip students with these skills are discussed. Some current research on features and models of lecture discourse, particularly as they relate to the ESL context, is discussed. Areas for future research are discussed, and some ways in which the rhetoric of teleconference lecture techniques may differ from that of traditional lectures are identified. Contains 24 references. (MSE)

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ED 424 744

Models of Lecture Discourse: Applications for Academic Listening and Future Research Directions

Colloquium on Academic Listening within the EAP Curriculum

Sunny Hyon, Cal State University, San Bernardino

TESOL Convention, Orlando, FL., March 1997

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Sunny Hyon, Cal State University, San Bernardino
TESOL Convention, Orlando, FL., March 1997

Welcome to this colloquium on Academic Listening in the EAP curriculum. I'm Sunny Hyon from Cal State University, San Bernardino and I wanted to start by giving a brief overview of the motivation behind the colloquium and introducing the speakers and the themes each will be discussing today.

In recent years, a considerable amount of research has emphasized the importance of effective listening skills and strategies for ESL undergraduate and graduate students studying at English speaking institutions. The academic listening skills in particular focus have been those required within the lecture context, which is not surprising considering the prominence of the lecture in tertiary institutions and its relationship to students' academic success. In a recent survey of over 230 university and college faculty, Ferris and Tagg (1995) found that the most common delivery mode for instruction is the lecture. Indeed, EAP listening expert Malcolm Benson (1994) has called the lecture "the central ritual of [university] culture" (p. 181).

Given the place of the lecture within academic culture, it follows that for university students, effective listening skills for lectures is critical to academic success. Much research, however, has indicated that this key component for academic success often presents a number of difficulties for NNSs. Olsen and Huckin (1990) observe, "Even NNSs with good scores on standard language proficiency examinations have severe problems understanding even well-

structured and well-presented lectures." Similarly, EAP listening expert Tony Lynch (1993) calls difficulties with lecture comprehension "the principal problem" encountered by many NNS students "at the start of their academic course."

Against this backdrop, this colloquium aims to address ways that EAP instructors can improve students' lecture listening skills by discussing the types of background discourse knowledge and listening strategies that ESL students need to effectively comprehend lectures and ways that EAP instructors can equip students with these skills. In addressing these issues, the first two panelists will focus on the characteristics of lecture discourse itself and ways of building students' knowledge of this discourse in order to improve their lecture comprehension. I will be speaking first and will review some current models of lecture discourse and the applications of those models for EAP listening instruction. I will also discuss the need for other models of lectures delivered in non-traditional modes, such as distance education, which NNSs may be increasingly required to listen to. I will be followed by Judy Dyer from the University of Michigan who will discuss the form and function of a particular element within lecture discourse--that is, the anecdote--and the importance of anecdotes for the ESL listener. Joan Morley, also from the University of Michigan, will finish our presentations by discussing models for teaching academic listening skills in the EAP classroom. We will save the last segment of our time today for questions and comments.

I would like to begin our presentations by reviewing some of the current literature on features of lecture discourse that ESL students need to understand in order to listen effectively to academic lectures, ways of equipping students with that

knowledge to improve lecture comprehension, and further research that needs to be done in this area.

In some traditional paradigms of L2 listening, researchers have emphasized the importance of listeners' general linguistic knowledge for effective listening comprehension. In these paradigms, as Olsen and Huckin observe, NNSs' difficulties with listening to lectures have been attributed largely to unfamiliarity with bottom-level linguistic units such as sounds, words, and grammatical structures in the L2.

While not dismissing the importance of lower-level language knowledge, more recent paradigms of listening have argued that effective lecture comprehension depends not only on sentence-level linguistic proficiency but also on knowledge of more global elements of the lecture text, such as the organizational structure of lecture discourse. This type of structural knowledge is often referred as "formal schemata" and the use of such schemata during the lecture listening process involves what is known as "top-down processing" whereby a listener uses background knowledge of lecture structure to predict and interpret the meaning of the incoming speech. While most research conducted on the impact of formal schemata on comprehension has been done in the area of reading (see, for example, the work of Patricia Carrell) ESL listening expert John Flowerdew (1994) argues that "there is every reason to suggest that [schemata] play just as important a role in listening." For example, prior knowledge of the rhetorical structure of a lecture--what is presented first, second, third, and so on--may help listeners predict and

identify where in the lecture organization the instructor is presenting main and supporting points.

A number of researchers have observed that NNSs lack knowledge of the structural and stylistic features of lectures and thus have difficulties with predicting and grasping key points within the organizational framework of a lecture argument. In one study, for example, Olsen and Huckin (1990) found that some ESL students failed to recall key points in an engineering lecture despite adequate English proficiency, suggesting that their comprehension difficulties may have been due in part to their unfamiliarity with the structure of the lecture material. Similarly, in a comparative study of NS and NNS students' notes of a Commercial Law lecture, Clerehan (1995) found that the NNSs could not recognize how the lecturer was organizing ideas within a law lecture framework and thus failed to recognize relationships between main and subsidiary points.

So out of a growing sense that many NNS may need fuller knowledge of lecture structure in order to improve their academic listening abilities, researchers have developed models of lecture discourse that provide language instructors with information about lecture structure, or formal schemata, that they can pass onto their ESL students. And it's to these models of lecture discourse structure and their applications that I would now like to turn.

One of the first descriptions of lecture discourse for ESL instructors, outlined in your handout, was presented by Murphy and Candlin (1979) who applying British linguists' Sinclair and Coultard's model of discourse, framed the lecture as made up of acts, including markers (such as "well", "right" and "now"), starters (which direct

the listener's attention to a specific area, ex: "Well, let's get on with engineering"), elicitation, informatives and comments (which provide the content information, ex: "Forces in equilibrium, vectors must form a closed triangle"; further comment, ex: "more usually known as the triangle of forces"), asides, metatstatements (which comment on the lecture itself--"I want to mention two types of generator"), and conclusions (summarizes information in a lecture transaction, ex. "so there you've got 3 forces in equilibrium"). Within this model, Murphy and Candlin did not specify the order in which these acts may occur. In more recent models of lecture discourse, however, scholars have elaborated on the sequencing of certain moves in lectures.

Allison and Tauroza (1995), for example, have described a linear sequence of moves which form an elaborated problem-solution structure (described first in Hoey, 1983) found in some science lectures. In this model, the lecturer first outlines a particular situational context. In the example they give of a lecture on "Humans as information processors" (course on fundamentals in information systems), the situation is that humans have a limited capacity to process information. The lecturer then discusses a particular problem that emerges from the situation--that humans may become overloaded with information and their task performance can falter. In the next move of the structure, the lecturer then proposes a solution to that problem--that humans filter out information to avoid overload. The lecturer then includes an additional move--an evaluation segment--critically evaluating the proposed solution, noting some of the problems connected to the filtering solution, including omission or distortion of important information. Problem-solution

structures have also been observed by Olsen and Huckin (1990) and Dudley-Evans (1994) in Mechanical and Highway Engineering lectures.

Also examining engineering lectures following a problem-solution structure, King (1994) found that verbal and visual information occupy different places within this model. As noted in 2b, the visual material, he says, (such as a formula written on a board or an overhead slide) often fills the first move of this structure--setting up the situation to be discussed--and the lecturer's accompanying verbal message fills the other moves, including statements about problems related to the situation in the visual and evaluation of solutions to those problems (Handout: "it's a very high r-squared . . . but there's no problem in the sense that we've got a relationship").

The last model of lecture discourse that I wanted to outline is a phasal model of lectures proposed by Lynn Young which is less linear than the problem-solution structure described by Allison and Tauroza. From her study of undergraduate lectures in a number of disciplines, Young has posited that lectures are structured around a series of moves, or phases, which do not appear in a particular order and which can re-appear in a single lecture several times. Some of the phases that she found in these lectures are summarized in 3. Three of the six phases are called Metadiscoursal phases, those in which the lecturer comments on the structure or content of the lecture discourse. The Discourse Structuring strand is one in which lecturers indicate "the direction that they will take the lecture" (p. 166). For example, as noted in your handout, a lecturer may say "Let me give an example from Belgium," indicating what the lecturer is about to do. The conclusion phase

involves the lecturer referring back to and summarizing "points made during the lecture". The third metadiscoursal strand--evaluation--(similar to the evaluation segment in the problem-solution structure of science lectures) is one where the lecturer comments critically on information already presented using phrases expressing explicit judgment such as "obviously", "very important" and "very efficient." The three other non-metadiscoursal phases include interaction, theory, and examples, where the lecturer interacts with students, presents theories, models and definitions, and gives examples of these key theoretical concepts.

In linking these analyses to language teaching, researchers have discussed ways that these discourse models of lecture structure can be applied within the academic listening classroom. Tauroza and Allison (1994), for example, have suggested using pre-listening activities to build students' schemata of the elaborated problem-solution structure to help them recognize key ideas in this structure. They argue that students may especially benefit from being sensitized to the final evaluation move--where the lecturer gives a critique of the solution--because they found that a number of non-native speakers had problems comprehending this section, possibly because of these students' unfamiliarity with the placement and function of evaluation in the lecturer's structure.

Young also suggests that her model of lecture as a set of recurring phases can be useful for EAP listening instruction. She suggests that conceiving lectures as a set of recurring phases can help teachers and students understand that the lecturer conveys information through a variety of strands, like theoretical discussion, exemplification, and conclusions, which can help students predict and identify in

what strands the lecturer introduces and revisits main ideas during the flow of the lecture.

Although not outlining any specific teaching activities, King, in discussing visual and verbal information in problem-solution lectures, notes that lower-level ESL students, while recording the visual information in their notes, may fail to record the lecturer's important verbal commentary on the visual. Thus, language classroom tasks such as guided note-taking which build students' schemata of the relationship between visual and verbal elements in lectures may help NNS better attend to and comprehend the kind of information that each type of material presents in a problem-solution structure.

Now, although these models of lecture discourse and their applications can be usefully presented in academic listening classrooms, some scholars have highlighted the fact that lectures from different disciplines do not all follow the same models and that EAP instructors need to help students develop appropriate schemata for listening to lectures in different disciplines. In studying lectures taught in English at City University in Hong Kong, for example, Flowerdew and Miller (1995), found that the computer science lectures followed a problem-solution framework while the economics lectures were structured around a series of related concepts illustrated by examples.

Dudley-Evans (1994) has also noted differences between the rhetorical structures found in plant biology and Highway Engineering lectures, with the Highway Engineering lectures often following a problem-solution framework and some plant biology lectures being organized around experimental research studies.

Thompson (1994) also found that the structure of lecture introductions from a variety of disciplines varied widely, noting that "it proved highly problematic to find 'robust preferred orders'" in these introductions. (p. 179).

In response to such variation, recommendations have been made for helping NNSs develop formal schemata of lecture structures that are most appropriate for their major disciplines. Dudley-Evans (1994), for example, has described a subject-specific approach to teaching academic listening at the University of Birmingham which raises students' awareness of lecture structures typical of certain scientific fields. For example, in one activity in this approach, students are familiarized with the structure of Highway Engineering lectures by reconstructing the order of a scrambled problem-solution structure typical of these lectures.

This recent scholarship suggests the importance of further research on ways that lecture structure varies across disciplines in order to help EAP listening instructors equip their students with appropriate schemata for listening in their academic fields. In addition to more cross-disciplinary research, however, I would also like to propose the need for more research on ways lectures may vary across dimensions besides discipline, including the technological mode in which lectures are delivered. Technological mode is a particularly important factor to consider in describing lecture discourse in light of the increasing use of distance education media for delivering lectures at universities and workplaces. Indeed, Suchan and Crawford (1995) suggest that organizations not involved in distance media, may "end up dinosaurs in a changing world." As more native and non-native speaking students listen to lectures in these modes, further research will need to examine the

discourse characteristics of distance lectures and to consider how instructors can equip ESL students with appropriate schemata for listening to these kinds of lectures.

To date, however, relatively little research has examined lecture discourse in distance education and few, if any, discussions have related the features of distance lectures to the ESL listener.

For now, I would like to suggest a few areas where research may reveal distinctive discourse features in one popular distance lecture mode--interactive video teleconferencing-- and ways of applying knowledge of these features to academic listening instruction. Broadly speaking, a teleconferencing lecture is a lecture recorded by cameras and microphones at one site and transmitted to one or more student audiences at a different site. Video and audio information from those student sites are in turn sent back to the lecturer site, thus allowing the lecturer and students to see and hear each other on TV monitors at their sites (Suchan and Crawford, 1995; Fast, 1995).

From my examination of reports on teleconferencing lecture techniques and my own observations of teleconferencing lectures, I have identified several areas where the rhetorical structure of these lectures may differ from structures in traditional lectures. These areas are 1) explicitness of organizational framework 2) density of content information presented and 3) the frequency and placement of visual aides in the lecture structure.

With respect to the first feature, some of the distance learning literature suggests that lectures given in a teleconferencing context may be more explicitly

organized than traditional lectures due to the fact that teleconferencing lectures need to be more carefully planned than distance lectures for a variety of reasons. (Harrington, personal communication; Andrews et al, 1996; ITD, 1995; Suchan and Crawford, 1995). One of these reasons, cited by Bray et al (1995) is that planning on-the-spot about how to present lecture content is difficult in teleconferencing because 'dead air time' "may seem wasteful or unnatural" in this TV context (p. 18). Similarly, Power (1993), a lecturer who has used teleconferencing in distance ESL teacher training courses, notes that "silence is deadly on TV or radio--we're not used to it" (p. 9). Suchan and Crawford (1995) also observe that extra preparation is necessary since "the teacher must operate the technical equipment while teaching [and] the ability to 'think on your feet' can be inhibited" (p. 33). Thus, because of the greater need for pre-scripting, teleconferencing lectures may reflect a tighter organizational structure than traditional lectures, one which explicitly marks the lecturer's key points and includes few digressions and last minute changes in format.

Also because of the potentially greater pre-planning and the few pauses taken during the teleconferencing lecture for on-the-spot planning, the density of information presented within these lectures may be greater than in traditional lectures. From his own experiences with conducting teacher training in teleconferencing modes, Power (1993) has found that "you need more material to teach [in distance modes] than you do in an interactive on-site class" (p. 8). Miller et al, 1992, have also observed that "our teachers have found that their 50 minute distance learning classes have no down time; this medium they say uses up far

more material than our normal classes (Miller et al, 1992, p. 34). Indeed, research on spoken and written discourse analysis reviewed by Flowerdew and Tauroza (1995) has revealed that scripted texts may be more informationally dense than less scripted, more conversational texts. While teleconferencing lectures are not likely as scripted as read lectures, they may be more pre-planned than most traditional lectures and therefore reflect some of the density of scripted texts.

A third potentially distinguishing feature of teleconferencing lecture structure is the frequency and role of visual media within the rhetorical organization of these lectures. Distance education literature as well as my own observations of teleconferencing lectures suggest that visuals may first of all be more prevalent in these types of lectures than in traditional lectures because they add variety and stimulation to a potentially dull broadcast of a talking head behind a podium. Martin and Bramble (1996) note that in teleconferencing courses for the military in Florida, "approximately ~1200 graphics [were] developed for each of the [Army] courses". Graham Mercer and Anne Harrington (1995) of the Michigan Business School also advise teleconferencing instructors to use at least three visual aides for every 15 minutes of lecture.

Visuals may also fill an important role within the structure of the teleconferencing lecture. Some instructors indicate that they use visuals to highlight main ideas in teleconferencing lecture, in order to enhance the clarity of their presentation in this mode. In a report by Andrews et al (1996) for example, a business school professor, commented that he used a series of slides to present

important points in his lecture (p. 10). And in teleconferencing lectures I've watched, I've noticed that lecturers often use visuals to list key points.

These are some suggestions of how rhetorical structure in teleconferencing lectures may differ from that of traditional lectures. If empirical research does in fact reveal teleconferencing lectures to be distinctive in these ways, EAP instructors can use this information to prepare NNSs to listen effectively to lectures in distance contexts. Language instructors, for example, can communicate to their students that because of greater lecturer pre-planning, they may find teleconferencing lectures to be more explicitly organized with fewer digressions than traditional lectures, which may help them to identify main and subsidiary points within these distance lectures. However, instructors will also need to prepare students for the possibly greater density of content information that students will have to process in different segments of the teleconferencing lecture as well as the more frequent use of visual aids than in some traditional lectures, and the use of these visuals for presenting main ideas in the teleconferencing lecture.

I have outlined some of the applications of current models of lecture discourse for academic listening instruction as well as further research needed on preparing ESL students to listen to lecture discourse in distance education modes.

I would now like to turn the floor over to Judy Dyer who will be speaking about another aspect of lecture discourse--the anecdote--and its implications for ESL listeners.

Handout

Models of Lecture Discourse:
Applications for Academic Listening and Future Research Directions

Sunny Hyon, Cal State University, San Bernardino
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TESOL Convention, Orlando, FL, March 1997

I. Models of Lecture Discourse

1. Murphy and Candlin (1979): 'Acts' in lecture discourse (cited in Lebauer, 1984)
Marker: Marks the boundaries of transactions (e. g. Well. . . Right. . . Now . . .)
Starter: Directs attention to a specific area (e. g. Let's get on with the engineering)
Elicitation: Elicits response from students (e. g. I think that most of you have met the result before, have you?)
Accept: Responds to information offered (e. g. Yes. Good)
Informative: Presents content information (e. g. for the three forces to be in equilibrium, their vectors must form a closed triangle.)
Comment: Contributes related information (e. g. more usually known as the triangle of forces)
Aside: (e. g. running out of blackboard here)
Metastatement: Comments on the lecture speech act itself (e. g. I want to mention two types of generator)
Conclusion: Summarizes information in a lecture transaction (e. g. so there you've got three forces which are in equilibrium)

2a. Allison and Tauroza (1995): Problem-Solution Model of Lectures
Ex: Undergraduate Lecture on Humans as Information Processors
Situation: Humans have a limited capacity to process information
Problem: Information overload is a problem (performance decreases)
Solution: We solve this problem by filtering
Evaluation (of Solution): However there are problems/drawbacks connected to filtering (such as omission, distortion, inferences).

2b. King (1994): Placement and Function of Visuals in Problem-Solution Model
Situation--Visual Material (e.g. r2=.997 [written on board])
Problem, Solution, Evaluation--Verbal Material (e.g. it's a very high r squared. perhaps too high for reasons I shall be indicating to you in a moment. but there is no problem in the sense that we haven't got a relationship)

3. Young (1994): Phasal Analysis of Lectures
Phases (not in a particular order)
Metadiscoursal phases
Discourse Structuring: Announces direction of lecture: (e. g. Let me give an example from Belgium.)
Conclusion: Summarizes points made (e. g. So this [lecturer points to material written on the board] is an example of a rate one third code.)

Evaluation: Comments critically on information presented (e.g. obviously error detection is a very important function)
Other phases
Interaction: Engages in interaction with students (e. g. Does anyone have an idea?)
Theory/Content: Presents theories, models, and definitions.
Examples: Gives examples to illustrate theoretical concepts.

II. Applications of Models for Academic Listening Instruction
Tauroza and Allison (1994): Pre-listening activities building formal schemata (especially of evaluation segment)
Young (1994): Sensitizing students to phases
King (1994): Making students aware of connections between visual and verbal elements in lectures

III. Variation in lecture discourse across disciplines
Flowerdew and Miller (1995): Computer Science, Economics, and Public and Social Administration lectures
Dudley-Evans (1994): Highway Engineering vs. Plant Biology lectures
Thompson (1994): Variation across lecture introductions

IV. Further Research: Variation in lecture discourse across traditional and distance modes of delivery

Discourse structures of teleconferencing lectures: Potentially distinctive features
1. Explicitness of organizational framework
2. Density of content information presented
3. Frequency and function of visual information within structure

V. Preparing EAP students to listen to teleconferencing lectures

Instructor

Class

Adapted from Mercer and Harrington (1995)

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